FORM PTO-1390 (Modified) (REV 10-95) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371

ATTORNEY'S DOCKET NUMBER: 2005

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR): 10/070709

INTERNATIONAL APPLICATION NO.	INTERNATIONAL FILING DATE	PRIORITY DATE CLAIMED
PCT/EP 00/07842	AUGUST 11, 2000	SEPTEMBER 17, 1999

TITLE OF INVENTION
DEVICE AND METHOD FOR COMPENSATING NON-UNIFORMITIES IN IMAGING SYSTEMS

APPLICANT(S) FOR DO/EO/US
Stefan EGGERS, Claas ANDREAE

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☐ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c) (2))
   a. ☐ is transmitted herewith (required only if not transmitted by the International Bureau).
   b. ☒ has been transmitted by the International Bureau.
   c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☐ A copy of the International Search Report (PCT/ISA/210).
8. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
   a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
   b. ☐ have been transmitted by the International Bureau.
   c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
   d. ☐ have not been made and will not be made.
9. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
10. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).

Items 13 to 18 below concern document(s) or information included:

13. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☒ A **FIRST** preliminary amendment.
    A **SECOND** or **SUBSEQUENT** preliminary amendment.
16. ☐ A substitute specification.
17. ☐ A change of power of attorney and/or address letter.
18. ☒ Certificate of Mailing by Express Mail
19. ☐ Other items or information:

EL 796689203 US

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR)	INTERNATIONAL APPLICATION NO.	ATTORNEY'S DOCKET NUMBER
10/070709	PCT/EP 00/07842	2005

20. The follo

BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)) :

		CALCULATIONS PTO USE ONLY
☐	Search Report has been prepared by the EPO or JPO	**$930.00**
☐	International preliminary examination fee paid to USPTO (37 CFR 1.482)	**$720.00**
☐	No international preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO (37 CFR 1.445(a)(2))	**$790.00**
☒	Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2) paid to USPTO	**$1,070.00**
☐	International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4)	**$98.00**

ENTER APPROPRIATE BASIC FEE AMOUNT =	**$890.00**	
Surcharge of **$130.00** for furnishing the oath or declaration later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492 (e)).	**$0.00**	

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	8 - 20 =	0	x $18.00	**$0.00**	
Independent claims	2 - 3 =	0	x $80.00	**$0.00**	
Multiple Dependent Claims **(check if applicable)**.			☐	**$0.00**	
TOTAL OF ABOVE CALCULATIONS =				**$890.00**	
Reduction of 1/2 for filing by small entity, if applicable. Verified Small Entity Statement must also be filed (Note 37 CFR 1.9, 1.27, 1.28) **(check if applicable)**.			☐	**$0.00**	
SUBTOTAL =				**$890.00**	
Processing fee of **$130.00** for furnishing the English translation later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492 (f)).			+	**$0.00**	
TOTAL NATIONAL FEE =				**$890.00**	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) **(check if applicable).**			☒	**$40.00**	
TOTAL FEES ENCLOSED =				**$930.00**	
				Amount to be: refunded	$
				charged	$

☐ A check in the amount of to cover the above fees is enclosed.

☒ Please charge my Deposit Account No. **19-4675** in the amount of **$930.00** to cover the above fees.
A duplicate copy of this sheet is enclosed.

☒ The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. **19-4675** A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

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SIGNATURE

MICHAEL J. STRIKER
NAME

27233
REGISTRATION NUMBER

MARCH 12, 2002
DATE

UNITED STATES PATENT AND TRADEMARK OFFICE

In re:

Applicant: EGGERS

Serial No.:

Filed:

PRELIMINARY AMENDMENT

March 12, 2002

Hon. Commissioner of
Patents and Trademarks
Washington, D.C. 20231

Sir:

Preliminarily to the issuance of an Office Action in the above identified application, please amend the same as follows:

In the specification:

Please amend the specification as attached.

In the claims:

Cancel all claims without prejudice.

Add the following claims as attached.

REMARKS

This Amendment is submitted preliminarily to the issuance of an Office Action in the above identified application.

With the present Amendment applicants have amended the specification to provide headings, in order to bring it in compliance with the requirements of the U.S. Patent Practice.

The original claims have been canceled and replaced with a new set of claims including claim 9 and 15, the broadest method claims, together with claims 10-14 which depend on claim 9, and claim 16 which depends on claim 15.

The claims have been drafted in accordance with the U.S. Patent Practice to more clearly define the present invention to distinguish it from the prior art.

Consideration and allowance of present application is most respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place this case in condition for final allowance, then it is respectfully requested that such amendments or corrections be carried out by Examiner's Amendment, and the case be passed to issue. Any costs involved should be charged to the deposit account of the undersigned (No. 19-4675). Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, he is invited to telephone the undersigned (at 631-549-4700).

Respectfully submitted,

Michael J. Striker
Attorney for Applicants
Reg. No. 27233

In the specification:

On page 1, delete the heading "Description" and substitute therefore -- BACKGROUND OF THE INVENTION --.

On page 3, in line 5, between lines 4 and 6, insert the following heading -- SUMMARY OF THE INVENTION --.

On page 5, in line 1, before line 2, please insert the following heading -- BRIEF DESCRIPTION OF THE DRAWINGS --.

On page 5, in line 10, between lines 9 and 11, insert the following heading -- DESCRIPTION OF THE PREFERRED EMBODIMENTS --.

CLAIMS

9. An exposure and modulation device for modulating an exposure intensity in an integrated digital screen-imaging system, comprising a light source; a light modulator that includes a plurality of rows of light-modulating cells; a device for imaging on said light modulator; a device for imaging said light modulator on a photo sensitive material; a device for producing a relative motion between said light modulator and said photo sensitive material, so that a direction of motion is substantially perpendicular to a direction of said rows of said light-modulating cells; a device for scrolling a data pattern through various columns of said light modulator at a speed so that the imaging of any data pattern is kept substantially stationary relative to said photosensitive material during said motion; and at least one device for stopping the scrolling procedure after a certain adjustable number of cells of said light modulator used for exposure of said photosensitive material.

10. An exposure and modulation device as defined in claim 9, wherein said light modulator includes a digital mirror device.

11. An exposure and modulation device as defined in claim 9, wherein said light modulator has 1024*758 cells.

12. An exposure and modulation device as defined in claim 9, wherein said light modulator includes a liquid-crystal array.

13. An exposure and modulation device as defined in claim 9, wherein said light modulator includes magneto-optical cells.

14. An exposure and modulation device as defined in claim 9, wherein said light modulator includes ferroelectric cells.

15. A method for exposure and modulation of exposure intensity in an integrated digital screen imaging system in which light from a light source is imaged on a light modulator that includes a plurality of rows of light-modulating cells, the method comprising the steps of modulating the light from the light source by the light modulator; thereafter imaging the light modulator on a photosensitive material moving in a motion relative to the light modulator; selecting a direction of motion substantially perpendicular to a direction of the rows of the light-modulating cells; scrolling data to be imaged on the photosensitive material through columns of the light modulator at a speed so that the imaging of any data pattern is kept substantially stationary relative to the photosensitive material during the motion; and stopping the scrolling after a certain adjustable number of cells of the light

modulator used to expose the photosensitive material, depending on the exposure time specified for a respective pixel on the material to be exposed.

16. A method as defined in claim 15; and further comprising moving the data to be imaged to any column so that they can be transferred from there to subsequent columns.

DEVICE AND METHOD FOR COMPENSATING NON-UNIFORMITIES IN IMAGING SYSTEMS

Description

The invention concerns an exposure and modulation device for modulating the exposure intensity in the integrating digital screen imaging system (IDSI) comprising a light source and a light modulator that has a plurality of rows of light-modulating cells, and comprising a device for imaging on the light modulator, a device for imaging the light modulator onto photosensitive material, and a device for producing a relative motion between the light modulator and the photosensitive material, whereby the direction of motion is basically perpendicular to the direction of the rows of light-modulating cells, and comprising a device for scrolling a data pattern through the various columns of the light modulator at a speed by means of which the imaging of any data pattern is kept basically stationary relative to the photosensitive material during the motion.

The invention further concerns a method for exposing and modulating the exposure intensity in the integrating digital screen imaging system (IDSI), in which light from a light source is imaged on a light modulator that comprises a plurality of rows of light-modulating cells, and is modulated by this, after which the light modulator is imaged onto photosensitive material moving in a motion relative to the light modulator, whereby the direction of motion is basically perpendicular to the direction of the rows of light-modulating cells, and that the data to be imaged on the photosensitive material are scrolled through the columns of the light modulator at a speed by means of which the imaging of any data pattern is kept basically stationary relative to the photosensitive material during the motion.

The device described hereinabove was made known in DE 41 21 509 A1. The invention described in this document is particularly significant for processes in which large quantities of modulated light are required in the blue and ultraviolet range, such as in the exposure of printing plates, the exposure of printed circuits, and in stereolithography. According to the principle of the invention, the photosensitive material is moved continuously while the image contents are scrolled in the opposite direction at the same speed by the light modulator. The image contents therefore remain in one location on the material to be exposed. The exposure takes place by integrating all short, individual exposures of the cells in a row. Strips having a width corresponding to the number of rows of the light modulator are therefore exposed. A larger area is exposed by placing a plurality of strips next to each other.

The problem with the device described is that non-uniformities in the light modulator, e.g., caused by differences in illumination or imaging power differing at the local level when cells are controlled in uniform fashion, produce different exposure results within a partial image on the material to be exposed. As a rule, the differences between adjacent pixels on the photosensitive material cannot be detected by the human eye, because humans primarily see differences. Compensation is very problematic in areas, in particular, where non-adjacent pixels are projected next to each other on the photosensitive material. In the IDSI system, this affects the outer rows, because the exposed strips meet overlap there.

In contrast to the IDSI system, individual image sections are exposed using the digital screen imaging (DSI) system. The entire image is then composed of a plurality of individual images. Attempts to transfer the system for compensating non-uniformities used in the DSI system to adjust the energy in each cell separately were not successful. On the one hand, the necessary transmission rates at a maximum scrolling frequency of approximately 50 kHz and a necessary gradation depth of a minimum of 6 bits—with 8 bits even better—and

a light modulator width of 1024 cells far exceed the capabilities of control electronics. On the other hand, a light modulator does not exist that would operate quickly enough to guarantee a gradation of 6 to 8 bits at a cadence of 50 kHz.

The object of the invention, therefore, is to present a device and a method with which the exposure quality can be optimized using simple means.

The object on which the invention is based is attained by the fact that the device comprises at least one device for varying the number of cells of the light modulator used to expose the photosensitive material, or that, with the method according to the invention, the number of cells of the light modulator used to expose the photosensitive material can be varied.

The entire length of the image information is not scrolled through the light modulator. Instead, the scrolling process is stopped after a certain, adjustable number of cells. The exposure time can therefore be varied for every pixel in the row on the photosensitive material to be exposed. The integrated energy of a row can be defined exactly. The non-uniformities can thereby be compensated using a simple means of control.

The great advantage of the device according to the invention over DSI devices is that the number of cells to be calibrated can be reduced from many hundreds of thousands of cells to approximately one thousand rows.

According to a further advantageous exemplary embodiment of the invention, the light modulator comprises a digital mirror device (DMD). The individual mirrors of the digital mirror device can be controlled well without serious problems. The mirrors that are not used by the device according to the invention to expose the photosensitive material direct the light beam imaged on it away from the photosensitive material.

According to an advantageous exemplary embodiment of the invention, the light modulator comprises 1024 * 758 cells. This allows the gradation of the exposure energy to take place with a great level of detail. The adjustment can take place in 758 units or 1024 units, depending on the scrolling direction of the data pattern by the light modulator.

According to another very advantageous exemplary embodiment of the invention, it is provided that the light modulator comprises a liquid-crystal array, magneto-optical cells, or ferroelectric cells. In principle, any other variation of light modulators may be used as well. This results in the considerable advantage that every existing IDSI device can be modified with a device for varying the number of cells of the light modulator used to expose the photosensitive material.

As mentioned hereinabove, the object of the method is attained very advantageously by the fact that the number of cells of the light modulator used to expose the photosensitive material is varied.

The exposure time can be varied for every pixel on the photosensitive material to be exposed, because the image information is no longer scrolled across the entire length of the light modulator. The integrated energy of a row can be defined very exactly. The non-uniformities can therefore be compensated using a simple means of control.

According to a particularly advantageous exemplary embodiment of the method according to the invention, it is not necessary to first transfer the image data to the first column of the light modulator. The data can be transferred first to a column lying further back, for example. The columns located before them are not used for exposure. The exposure energy applied therefore decreases.

This is described in greater detail using the drawings, which represent an exemplary embodiment of the invention.

Figure 1 shows a schematic drawing of the entire exposure and modulation device,

Figures 2-5 show a schematic drawing of the principle of data pattern transmission, and

Figure 6 shows a schematic drawing of the light modulator with cells that are used and not used for the imaging.

Figure 1 is a schematic drawing of the exposure and modulation device 1: a light source 2 is imaged on a light modulator 4 using a first lens 3. The position of the photosensitive material 5 relative to the light modulator 4 is changed by a locator 6. The relative motion takes place in the direction of the cells of a row of the light modulator. Data patterns are transferred to the first column with cells 8 of the light modulator using a driver circuit 7. It is important that the transmission of the data pattern be synchronized with the motion of the photosensitive material 5. The data pattern transferred to the first column is moved to the next column in synchronization with the relative motion, so that the data pattern transferred to the photosensitive material 5 remains stationary on it. The light modulator 4 comprises a plurality of columns of cells 8. The data pattern transferred to the light modulator 4 comprises combinations of activated and non-activated cells 8. If the cells 8 are activated, the light falling on them is transferred to the photosensitive material 5 via a second lens 9. The light that hits inactive cells is directed away by the photosensitive material 5. A particularly positive aspect of the exemplary embodiment shown is the fact that a device 10 is provided that varies the number of cells available for exposure. This means that not all the cells 8 in a row are available for transmission of the data pattern. Since the intensity of exposure of the material to be exposed depends on the exposure time, i.e., on the available cells 8, this device 10 makes it possible to compensate non-uniformities in the image.

Figures 2 through 5 illustrate how a data pattern is moved from cell to cell in a row while remaining stationary on the photosensitive material 5. In Figure 2, a signal reaches the first cell Z1. In Figure 3, the same data pattern is transferred to the next column—cell Z2 in this case—while a new pattern is transferred to the first column—cell Z1 in this case. In Figure 5, the data pattern input first has reached cell 4 (Z4). Cells Z5 through Z6 cannot be controlled by the device 10 for transmission of the data pattern. They are not available for exposing the photosensitive material. If a higher exposure intensity is required, they are activated and the data pattern is transferred further.

Figure 6 shows a light modulator 4 that is subdivided into rows R1 through R9 and columns S1 through S8. The cells 11 indicated by diagonal lines are available for exposure. Data patterns are input in column 8 and transferred to column S7. A different number of cells 11 can be conrolled in the various rows R1 through R8. Since the intensity of exposure is integrated via the cells in a row, this results in different intensities of exposure for individual pixels on the photosensitive medium 5.

What is claimed is:

1. The invention concerns an exposure and modulation device (1) for modulating the exposure intensity in the integrating digital screen-imaging system (IDSI) comprising a light source (2), a light modulator (4) that comprises a plurality of rows of light-modulating cells (8), a device (3) for imaging on the light modulator (4), a device (9) for imaging the light modulator (4) on photosensitive material (5), and a device for producing a relative motion between the light modulator (4) and the photosensitive material (5), whereby the direction of motion is basically perpendicular to the direction of the rows of light-modulating cells, and comprising a device for scrolling a data pattern through the various columns of the light modulator (4) at a speed by means of which the imaging of any data pattern is kept basically stationary relative to the photosensitive material (5) during the motion,
wherein the device comprises at least one device (10) for varying the number of cells (11) of the light modulator (4) used for the exposure of the photosensitive material (5).

2. The device according to Claim 1,
wherein the light modulator (4) comprises a digital mirror device (DMD).

3. The device according to Claim 3,
wherein the light modulator (4) comprises 1024 * 758 cells (8)

4. The device according to one of the Claims 1 through 3,
wherein the light modulator (4) comprises a liquid-crystal array.

5. The device according to one of the Claims 1 through 4,
wherein the light modulator (4) comprises magneto-optical cells.

6. The device according to one of the Claims 1 through 5,

wherein the light modulator (4) comprises ferroelectric cells.

7. A method for the exposure and modulation of exposure intensity in the integrating digital screen imaging system (IDSI), in which light from a light source (2) is imaged on a light modulator (4) that comprises a plurality of rows of light-modulating cells (8), and is modulated by this, after which the light modulator (4) is imaged on photosensitive material (5) moving in a motion relative to the light modulator (4), wherein the direction of motion is basically perpendicular to the direction of the rows of light-modulating cells (8), and that the data to be imaged on the photosensitive material (5) are scrolled through the columns of the light modulator (4) at a speed by way of which the imaging of any data pattern is kept basically stationary relative to the photosensitive material (5) during the motion, wherein the plurality of cells (11) of the light modulator (4) used to expose the photosensitive material (5) can be varied.

8. The method according to Claim 7,
wherein the data to be reproduced can be moved to any column so they can be transferred from there to the subsequent columns.

Abstract of the Disclosure

An illumination and modulation device is described, as well as a method for modulating the exposure intensity in the integrating digital screen imaging system (IDSI), comprising a light source, a light modulator, and various devices. The object of the invention is to present a device and a method with which the exposure quality can be optimized using simple means. The object on which the invention is based is attained by the fact that the device comprises at least one device for varying the number of cells of the light modulator used to expose the photosensitive material or by the fact that, in the method according to the invention, the number of cells of the light modulator used to expose the photosensitive material can be varied.

February 20, 2002

DECLARATION

The undersigned, Dana Scruggs, having an office at 7970 Sunset Cove Drive, Indianapolis, Indiana 46236, hereby states that she is well acquainted with both the English and German languages and that the attached is a true translation to the best of her knowledge and ability of EGGERS, S. ET AL, entitled "Device and Method for Compensating Non-Uniformities in Imaging Systems", including the amended pages.

The undersigned further declares that the above statement is true; and further, that this statement was made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or document or any patent resulting therefrom.

Dana Scruggs

Dana Scruggs

DECLARATION AND POWER OF ATTORNEY FOR NATIONAL STAGE OF PCT PATENT APPLICATION

As a below-named inventor, I hereby declare that:

Stefan EGGERS
Claas ANDREAE

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled **DEVICE AND METHOD FOR COMPENSATING NON-UNIFORMITIES IN IMAGING SYSTEMS** the specification of which was filed as PCT International Application number PCT/EP 00/07842 on August 11, 2000.

I hereby state that I believe the named inventor or inventors in this Declaration to be the original and first inventor or inventors of the subject matter which is claimed and for which a patent is sought.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d) or Section 365 (b) of any foreign application(s) for patent or inventor's certificate, or Section 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate or PCT International application having a filing date before that of the application on which priority is claimed.

Prior foreign application(s):			Priority claimed:	
199 44 760.8	GERMANY	SEPTEMBER 17, 1999	X	
(Number)	(Country)	(Date filed)	Yes	No
(Number)	(Country)	(Date filed)	Yes	No

As a named inventor, I hereby appoint the following attorney to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Michael J. Striker, Reg. No. 27233

Direct all telephone calls to Striker, Striker & Stenby at telephone no.: (631) 549 4700 and address and all correspondence to:

STRIKER, STRIKER & STENBY
103 East Neck Road
Huntington, New York 11743
U.S.A.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that wilful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such wilful false statement

may jeopardize the validity of the application or any patent issued thereon.

Signature: Stefan Eggers	Date: 02/13/02	Residence and Full Postal Address: Hoeppnerallee 46 21465 Wentorf Germany DEX
Full Name of First or Sole Inventor: Stefan EGGERS	Citizenship: GERMAN	
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Full Name of Fourth Inventor:	Citizenship:	
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Full Name of Fifth Inventor:	Citizenship:	
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Full Name of Sixth Inventor:	Citizenship:	
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Full Name of Seventh Inventor:	Citizenship:	
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Full Name of Eighth Inventor:	Citizenship:	
Signature:	Date:	Residence and Full Postal Address:
Full Name of Ninth Inventor:	Citizenship:	

1W

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